

4 FORESTRY NO. 8

WILLIAM R. MILES

Animal damage to trees is apt to be most severe from late fall to early spring. During this period, rabbits, mice, deer, and squirrels turn to trees for food because of the lack of other plant material. Some animals--porcupines, pocket gophers, and dogs--damage trees throughout the year.

The traditional method of preventing tree damage has been to remove the offending animal from the area. Hunting, trapping, and poisoning are effective removal methods but all involve time or skill and present a hazard that may deter the average tree owner from using them.

Other methods that put the tree out of reach or make it unpalatable can be employed. Outlined below are the recommendations for protecting trees from specific animals.

RABBITS

Rabbits girdle trees and sometimes even cut down small seedlings. You can fence trees against rabbits, but a more effective barrier is created by placing cylinders of hardware cloth or mesh screen around the base of each tree. Be sure to wrap the tree high enough so rabbits can't get at it by standing on the snow.

If you have a number of trees to protect, using screens may be too expensive and time consuming. Repellents may be the best solution for you. Remember that a repellent is not a poison; it simply renders the tree undesirable through taste or smell.

You can either spray or paint repellents on trees. Though good repellents can be made at home, the preparation is rather involved. Since many good commercial repellents are available, we recommend that you consider using them.

Effective commercial repellents generally contain one or more of the chemical ingredients abbreviated TNB-A, TMTD, or ZAC. Some recommended repellents for rabbits are Z.I.P., TAT-Go, Selco Rabbit and Deer Repellent, Peter Rabbit Repellent, Chaperone, Arasan 42-S, Magic Circle, and No. 96-A. There may be other effective commercial repellents besides these.

All of the above preparations are effective against rabbits. You may purchase them from hardware stores, garden supply stores, feed and seed stores, or nurseries. Always follow the

Protecting Trees from Animal Damage

manufacturer's directions when you use commercial products.

Two mix-your-own repellents are:

(1) Add 1 gallon of asphalt water emulsion to 2 gallons of water. Then stir in 3 pounds of Thiram (75 percent) and mix thoroughly.

(2) Add 1 gallon of asphalt water emulsion to 2½ gallons of water. Then add 1 pound of household detergent and mix until smooth. Add 3 pints of Black Leaf 40 and mix thoroughly.

Asphalt water emulsions usually can be obtained at lumberyards and from other building supply dealers. Thiram (75 percent) is sold as a fungicide under the names Arasan SF-X and Tersan 75 and can be obtained from seed and feed outlets.

MICE

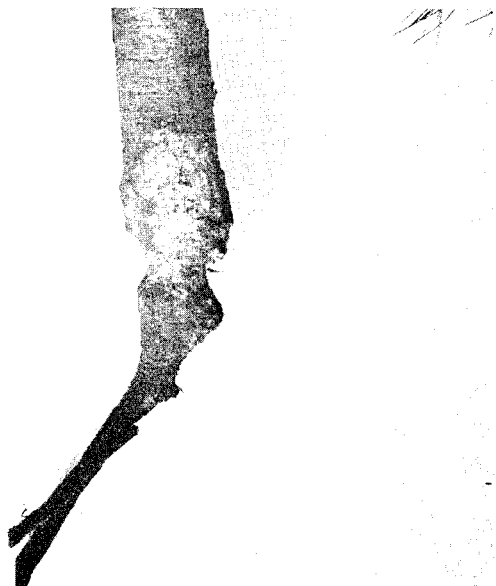
Mice generally damage a tree by gnawing and subsequently girdling its stem. You can effectively protect the bases of trees by placing cylinders of ¼-inch mesh hardware cloth around them. Be sure to extend the cylinder deep enough into the soil to prevent mice from getting underneath the screen.

You can insure good tree protection, especially for young fruit and yard plantings, by placing 5-quart oil cans with both ends removed around tree bases.

One of the best deterrents against mice is a clean planting, especially in the row. Repellents also are effective; those recommended for rabbits usually will work against mice. Using mouse poisons containing strychnine or zinc phosphide on oats and wheat usually is effective. Caution: Be sure to follow manufacturer's directions when using any commercial poison.

DEER

Deer may feed on and damage the tops and side branches of small trees. Bucks often damage stems by rubbing them with their antlers. The repellents listed for rabbits sometimes are effective against deer. Fencing for deer is very expensive and you should consider it only if you have very high priced plantings. For deer exclosures to be effective, fences must be high and constructed with posts and heavy mesh wire. If damage from



Pocket gopher damage on red pine roots.

deer is severe, notify your local game warden.

SQUIRRELS

Squirrel damage usually is confined to the gnawing and stripping of bark in tree tops. Squirrel damage may be severe in stands of sugar maple. Protect isolated trees by placing a 2-foot band of smooth metal around the tree trunk 6 to 8 feet above the ground. Remove any branches that are less than 6 feet from the ground.

Z. I. P. rabbit repellent is effective against squirrels. Nicotine sulfate spray or a mixture of 1 teaspoon Lysol, 3 ounces Epsom salts, and 1 gallon of water also is effective. Spray every 2 weeks during the growing season and after any hard rain during the season.

PORCUPINES

Porcupines usually cause damage by girdling the tops of large trees. The most effective control is to kill the offending animal. Repellents are not generally recommended, though Tanglefoot may be effective if used on individual trees. To protect individual trees, place a broad band (3 to 4 feet wide) of smooth metal around the tree 3 to 6 feet above the ground. Remove all branches below this band.

According to the National Wildlife Federation, an application of the following formula will keep porcupines from gnawing on paddles, handles, and cabin steps. Stir 1 pound of copper naphthenate into 2½ quarts of mineral spirits and spread on wood as you would paint. This formula gives the wood a greenish tint but discourages animals.

POCKET GOPHERS

The pocket gopher is active year round, but he is the most damaging in the spring and fall. Gophers feed on tree roots below the ground line; the trees eventually die and can be easily pulled up. In plantations, your best and easiest control method is to use a tractor-pulled "burrow-building" machine. This machine deposits poisoned bait in artificially created tunnels that intercept pocket gopher runways. Trapping and poisoning are the most successful methods of getting rid of individual gophers.

For further information on pocket gopher control, contact your county extension agent or Soil Conservation Service office. University of Minnesota Extension Folder 75, Controlling Pocket Gophers, may be helpful; it is available at your county extension office.

DOGS

Damage to small conifers is apparent when patches of foliage near the ground appear brown and eventually die. The male dog is responsible, and this condition is most noticeable in the spring on outer exposed branches. Protect trees with fences or use a dog repellent.

BIRDS

Sapsuckers (commonly but erroneously called woodpeckers) cause the most apparent and severe bird damage to trees. Damage appears as rows of small holes on the tree trunk in neat horizontal and vertical lines. Use a mixture of two parts malathion to one part sugar syrup to discourage sapsuckers. Or you can smear the bark with Tanglefoot in the area where birds are active or wrap this area with hardware cloth or burlap.



Yellow-bellied sapsucker damage on mountain-ash.